

Title (en)

Method to manufacture at least a component of a blade of a wind-turbine

Title (de)

Verfahren zur Herstellung mindestens einer Komponente einer Windturbinenschaufel

Title (fr)

Procédé de fabrication d'au moins un composant d'une pale d'une éolienne

Publication

EP 2283995 A1 20110216 (EN)

Application

EP 09010464 A 20090813

Priority

EP 09010464 A 20090813

Abstract (en)

The component comprises at least one layer of a composite structure. The layer is built up by a number of unconnected single roving-bundles (RB), which are aligned unidirectional and which shows a common direction. The roving-bundles are laid down automatically into a forming tool.

IPC 8 full level

B29C 70/38 (2006.01); **B29C 31/00** (2006.01); **B29C 70/20** (2006.01); **B29C 70/54** (2006.01); **F03D 1/06** (2006.01)

CPC (source: EP US)

B29C 70/20 (2013.01 - EP US); **B29C 70/382** (2013.01 - EP US); **B29C 70/541** (2013.01 - EP US); **B29C 70/545** (2013.01 - EP US); **F03D 1/065** (2013.01 - EP US); **B29L 2031/08** (2013.01 - EP US); **F05B 2280/6003** (2013.01 - EP US); **F05C 2253/04** (2013.01 - EP US); **Y02E 10/72** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (applicant)

WO 2009077582 A1 20090625 - VESTAS WIND SYS AS [DK], et al

Citation (search report)

- [XYI] WO 2009077582 A1 20090625 - VESTAS WIND SYS AS [DK], et al
- [I] WO 9007428 A1 19900712 - ZSOLNAY ANDREW M [US]
- [Y] EP 0392974 A2 19901017 - GURIT ESSEX AG [CH]
- [Y] WO 2007039085 A1 20070412 - AIRBUS GMBH [DE], et al

Cited by

FR3061070A1; DE102011051071A1; EP2927361A1; CN112507454A; EP2716434A1; EP2511078A1; KR20120117679A; CN102729485A; US10024298B2; US9333712B2; WO2014053631A1; US10544688B2; US10947855B2; US10040255B2; US10399287B2; US10618228B2; US11034101B2; EP2497945B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2283995 A1 20110216; **EP 2283995 B1 20130703**; CA 2713031 A1 20110213; CA 2713031 C 20170516; CN 101992553 A 20110330; CN 101992553 B 20171124; DK 2283995 T3 20130819; ES 2423185 T3 20130918; JP 2011038520 A 20110224; JP 5649865 B2 20150107; NZ 586777 A 20110630; US 2011037190 A1 20110217; US 8647545 B2 20140211

DOCDB simple family (application)

EP 09010464 A 20090813; CA 2713031 A 20100811; CN 201010254291 A 20100813; DK 09010464 T 20090813; ES 09010464 T 20090813; JP 2010181238 A 20100813; NZ 58677710 A 20100713; US 85065410 A 20100805